Unit 3, Activity 2

Select one of the instructional resources that you have identified and verify that the activity addresses at least one of the big ideas or supporting concepts from either your state's curriculum for Earth science or from the Earth Science Literacy Principles (ESLI 2010) or the Next Generation Science Standards. Once you are certain that the resource addresses content, concepts or skills that you will be expected to teach, prepare a lesson plan, which will 1) address geoscience content, 2) give students practice in utilizing one or more methods of geoscience, and 3) address a societal issue. The lesson may be specifically targeted to geoscience, or it may be interdisciplinary including aspects of either biology, chemistry, or physics. Consider the linking of these disciplines as an example of "systems thinking." Your lesson plan should include student handouts or instructions.

Your lesson plan should follow a standard format such as the 5E (BSCS 1989) or 7E (Eisenkraft 2003) models or any other format recommended by your methods professor. The following are essential components of your lesson plan:

- 1. A title or name/description of the lesson.
- 2. A statement of the Standard, Key Idea and Specific Understanding from your state's curriculum or the Big Idea(s) and Supporting Concept(s) from the Earth Science Literacy Principles or the Next Generation Science Standards and at least one big idea or supporting concept from an allied science that will be addressed.
- 3. A complete reference for the original source or inspiration for the lesson.
- 4. An outline of the lesson (Note: Standard types of lesson plans (e.g., 5E or 7E) are preferred).
- 5. A description of which methods of geoscience the students will use in completing the lesson.
- 6. An explicit statement of how the lesson utilizes the methods of geoscience.
- 7. An explicit statement of how the lesson addresses a societal issue and/or is interdisciplinary.
- 8. A list of what level or levels or Bloom's Taxonomy is/are accessed.
- 9. A description of how student understanding will be assessed (e.g., rubric) (How will you know that the students learned what you wanted them to learn?).
- 10. A handout or instructions that the students will receive.
- 11. If specific questions are asked in the student handout, a list of appropriate answers must be included in the lesson plan.
- 12. A list of equipment/materials that are needed for the lesson, including quantities of each.
- 13. An estimate of the preparation time required for the lesson (including gathering of materials).
- 14. A discussion of safety issues (if any) which must be considered when students are engaged in the activity.